

MATERIAL SAFETY DATA SHEET

HAZARD RATING:

4 = EXTREME

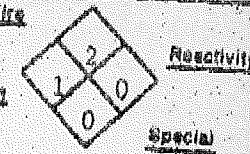
3 = HIGH

2 = MODERATE

1 = SLIGHT

0 = INSIGNIFICANT

* = CHRONIC HEALTH HAZARD - SEE SECTION V



I. PRODUCT IDENTIFICATION

TRADE NAME (as labeled): Zip Aerosol D-5067 Corrosion ShieldCHEMICAL NAMES, COMMON NAMES: MixtureMANUFACTURER'S NAME: Mitann Inc.DATE PREPARED: 6 12 86ADDRESS: 21320 Deering Court

Canoga Park CA 91304

EMERGENCY PHONE: (818) 883-4700BUSINESS PHONE: (818) 883-4700

II. HAZARDOUS INGREDIENTS

CHEMICAL NAMESCAS NUMBERSEXPOSURE LIMITS IN AIR
ACGIH(TLV) OSHA(PEL) OTHER

Methane, Dichlorodifluoro	75-71-8	1000 ppm	1000 ppm
Methane, Trichlorofluoro	75-59-4	1000 ppm	1000 ppm
Amsco Solv 1106	64742-47-8	n/e	n/e
Petrotect Amber (Proprietary mixture of Penreco)	n/e	500 ppm	n/e

III. PHYSICAL PROPERTIES

VAPOR DENSITY (air=1): 4.9SPECIFIC GRAVITY: 0.953-0.977SOLUBILITY IN WATER: n/aVAPOR PRESSURE, ~~atmosphere~~ 80 psig @77°FEVAPORATION RATE (butyl acetate = 1) 0.1APPEARANCE AND ODOR: Clear slight ethereal odorMELTING POINT OR RANGE: n/aBOILING POINT OR RANGE: -21.6 to 75°F

IV. FIRE AND EXPLOSION

FLASH POINT, F (give method): none to <100°F (after propellant evaporates) TCC

AUTOIGNITION TEMPERATURE, F: 490°

FLAMMABLE LIMITS IN AIR, VOLUME % LOWER 1% UPPER 5%

FIRE EXTINGUISHING MATERIALS

X Water spray

X carbon dioxide

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X foam

X dry chemical

SPECIAL FIREFIGHTING PROCEDURES: Use standard firefighting procedures to extinguish fires involving petroleum products. Use proper firefighting equipment and self contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Aerosol containers will burst if subjected to heat or flames above 130°F. Decomposition may occur.

V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE for each potential route of exposure.

Inhaled breathing. Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause light-headedness, giddiness, shortness of breath, and may lead to narcosis, cardiac irregularities, unconsciousness or death. Note: because of possible increased risk of eliciting cardiac dysrhythmias, catecholamine drugs such as epinephrine, should be considered only as a last resort in life threatening emergencies. May also cause weakness and nausea.

Contact with skin or eyes: Liquid contact may cause frostbite and/or defatting of skin. expected to be an eye irritant.

Absorbed through skin: not a corrosive irritant, may cause minor skin irritation.

Swallowed: Rats fed with Dichlorodifluoromethane dissolved in peanut oil. No deaths occurred at highest feasible dose = 1000 mg/kg. Harmful if aspirated into lungs do not induce vomiting.

HEALTH EFFECTS OR RISKS FROM EXPOSURE

Acute: Based on animal studies and human experiences this product composition posed no hazard to man relative to systemic toxicity, carcinogenicity, mutagenicity, or teratogenicity when occupational exposures are below its TLV.

Chronic: not established

FIRST AID: EMERGENCY PROCEDURES

Eye contact: In case of liquid contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin contact: Wash skin thoroughly with soap and water. Treat for frostbite if necessary. Obtain medical attention if irritation occurs.

Inhaled: Remove to fresh air, call a physician. If not breathing, give artificial respiration preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs.

Swallowed: If swallowed, give water or milk to drink. Consult a physician if necessary. Do not induce vomiting as the hazard of aspiration the material into the lungs is a greater hazard than allowing it to progress through the intestinal tract.

SUSPECTED CANCER AGENT?

NO: This product's ingredients are not found in the lists below.

YES: Federal OSHA NTP IARC Cal/OSHA*

*Note: California employers using Cal/OSHA-regulated carcinogens must register with Cal/OSHA.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Cardiovascular Disease

RECOMMENDATIONS TO PHYSICIAN: Because of a possible increased risk of eliciting cardiac dysrhythmias, catecholamine drugs, such as epinephrine, should be considered only as a last resort in life threatening emergencies.

VI. REACTIVITY DATA

STABILITY: Stable Unstable

CONDITIONS TO AVOID: Open flames and high temperatures.

INCOMPATIBILITY (materials to avoid): Alkali or alkaline earth metals - powdered Al, Zn, Be, and strong oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS (including combustion products):

HAZARDOUS POLYMERIZATION: May occur will not occur

CONDITIONS TO AVOID: This composition can be decomposed by high temperatures(open flames, glowing surfaces, etc.) forming hydrochloric and hydrofluoric acids-possible carbonyl halides.

VII. SPILL, LEAK AND DISPOSAL PROCEDURES

SPILL RESPONSE PROCEDURES (include employee protection measures): Ventilate area. Do not flush into sewer. Dike spill. Collect on absorbent material and transfer to steel drums for recovery or disposal. Lined butyl gloves should be used when handling liquid. Chemical splash goggles should be worn when handling liquid. Under normal manufacturing conditions, no respiratory protection is required when using this product. Self-contained apparatus (SCBA) is required if a large release occurs.

PREPARING WASTES FOR DISPOSAL (container types, neutralization, etc.): Collect on absorbent material and transfer to steel drums for recovery or disposal.

NOTE: Dispose of all wastes in accordance with federal, state and local regulations.

VIII. SPECIAL HANDLING INFORMATION
VENTILATION AND ENGINEERING CONTROLS: Local exhaust or mechanical ventilation, to keep airborne concentrations of this material below the recommended exposure standard.

RESPIRATORY PROTECTION: Self contained breathing apparatus (SCBA) is required if spill occurs, or if ventilation is inadequate.

EYE PROTECTION (type): Chemical splash goggles.

GLOVES (specify material): Butyl lined gloves.

OTHER CLOTHING AND EQUIPMENT: Impervious protective clothing.

WORK PRACTICES, HYGENIC PRACTICES: Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Mechanical ventilation should be used in low places.

OTHER HANDLING AND STORAGE REQUIREMENTS: Store aerosol containers, cans, buckets, and drums in cool dry area, out of sun's rays and below 130°F.

PROTECTIVE MEASURES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: None

IX. LABELING

LABELING (precautionary statements)* Use with adequate ventilation. Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with the skin. Do not take internally. Keep out of reach of children. Caution-Content under pressure. Do not puncture or incinerate. Keep away from open flame. Store below 120°F and out of sun's rays.
DANGER: Contains petroleum distillate, if swallowed do not induce vomiting. Call a physician.

THE INFORMATION ACCUMULATED HERIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

*Not required. Space has been provided on this form for optional use.